

REMARKS

This application has been carefully reviewed in light of the Office Action dated August 23, 2005. Claims 40 to 61 are in the application. Claims 1 to 39 have been canceled and new Claims 40 to 61 have been added. Claims 40, 45, 50 and 55 are the independent claims. Reconsideration and further examination are respectfully requested.

The drawings were objected to under 37 C.F.R. § 1.83(a) for failure to show every feature described in the specification. Specifically, the drawings allegedly failed to show system bus 304 and system bus 305. In this regard, a replacement sheet has been submitted for Figure 5 showing system bus 304 of image forming apparatus 301 and system bus 305 of computer 302. Withdrawal of this objection is therefore respectfully requested.

Claims 25 to 36 were rejected under 35 U.S.C. § 101 for allegedly being directed to non-statutory subject matter. In particular, the claims were allegedly directed to a set of instructions not embodied on a computer-readable medium. Without conceding the correctness of the rejection, the rejection is nonetheless believed to be obviated by the cancellation of the rejected claims. Reconsideration and withdrawal of the rejection are therefore respectfully requested.

Claims 1, 2, 8 to 14, 20 to 26 and 32 to 39 were rejected under 35 U.S.C. § 102(e) over U.S. Patent No. 6,771,385 (Iizuka). Claims 3 to 7, 15 to 19 and 27 to 31 were rejected under 35 U.S.C. § 103(a) over Iizuka in view of U.S. Patent No. 4,974,238 (Kobayashi). Without conceding the correctness of these rejections, the rejections are nonetheless believed to be rendered moot by the cancellation of the rejected claims. Newly-added Claims 40 to 61 are believed allowable over the Iizuka and Kobayashi patents for at least the following reasons.

Independent Claims 40 and 50

The invention of independent Claims 40 and 50 generally concerns distribution of control software used by an image forming apparatus to an external apparatus via a network. Among its many features, the invention of independent Claims 40 and 50 includes (i) receiving lot information which is stored in a memory of a consumable unit detachably located in an image forming apparatus, and (ii) distributing a control software, based on the lot information, to an external apparatus via the network.

Referring specifically to claim language, independent Claim 40 is directed to a software distributing system for distributing control software used by an image forming apparatus to an external apparatus via a network. The system includes a receiving unit configured to receive lot information which is stored in a memory of a consumable unit detachably located in an image forming apparatus and which is output by the external apparatus. The system also includes a controller unit configured to distribute a control software, based on the lot information, to the external apparatus via the network.

Independent Claim 50 is directed to an information processing method for distributing control software used by an image forming apparatus to an external apparatus via a network. The method includes a receiving step which receives lot information which is stored in a memory of a consumable unit detachably located in an image forming apparatus and which is output by the external apparatus. The method also includes a controlling step which distributes a control software, based on the lot information, to an external apparatus via the network.

In contrast, Applicants respectfully submit that the art of record, alone or in combination, is not seen to suggest or disclose at least the features of (i) receiving lot information which is stored in a memory of a consumable unit detachably located in an

image forming apparatus, and (ii) distributing a control software, based on the lot information, to an external apparatus via the network.

As understood by Applicants, Iizuka discloses a method of using a server connected with a network, including the steps of storing data of control software to transmit to a plurality of image processing apparatuses connected with the network, transmitting data of the software to at least one of the plurality of image forming apparatuses, receiving information regarding the function or history of the image forming apparatus, accumulating the received information regarding the function and the history of the image forming apparatus, upgrading the data of the software for improving the function based on the accumulated information regarding the function of the image forming apparatus, and transmitting the upgraded data of the software to the image forming apparatus. See Iizuka, Abstract.

Pages 3 and 4 of the Office Action assert that Iizuka (Figure 1 and Column 18, lines 27 to 35) discloses “receiving means by a data base server for receiving data from the network dealing with the consumable-unit information such as replenishing an amount of processing solution, an amount of processing gents [sic, agents?] to be supplied, etc., which is detachably loaded into the image forming apparatus.” Page 4 of the Office Action additionally asserts that Iizuka (Column 16, lines 6 to 8) discloses “an application server stores image formation control software and distributes it for printing apparatus depending on the consumable-unit information through the web-server.”

However, Iizuka is not seen to disclose or suggest at least the features of receiving lot information which is stored in a memory of a consumable unit detachably located in an image forming apparatus, and distributing a control software, based on the lot information, to an external apparatus via the network.

In particular, the portions of Iizuka cited by Office Action are seen to disclose that data can be delivered from a data base server through a web server, and that data of prescribed software can be delivered from an application server. See Iizuka, Column 16, lines 5 to 8. Software for controlling an image forming apparatus is stored in the application server and is to control, for example, printing speed, a paper width, or the state of sensors, and is developed by a person in charge of development, so that the latest one can be obtained for each image forming apparatus in need. See Iizuka, Column 18, lines 27 to 35.

However, such control data is not seen to be the same as lot information stored in the memory of a consumable unit. Specifically, Iizuka describes that information concerning the amount of consumables is one of several statistical data that the data base server obtains from the image forming apparatus, in contrast to actual lot information stored in the memory of a consumable unit. See Iizuka, Column 16, lines 35 to 42 and Column 18, lines 17 to 20. Thus the control software is installed based on the operating information of the image forming apparatus, rather than that of the consumable unit. Furthermore, Iizuka describes that the amount of processing solution, amount of processing gents and so on are items that can be controlled by the image formation apparatus control software, rather than items of data that are received from the consumable units. See Iizuka, Column 18, lines 27 to 35. Thus, Iizuka is not seen to disclose the feature of receiving lot information stored in the memory of a consumable unit.

As such, Iizuka clearly cannot describe the additional feature of distributing a control software, based on that lot information, to an external apparatus via the network.

Kobayashi has been reviewed and is not seen to remedy the above-noted deficiencies of Iizuka. As understood by Applicants, Kobayashi discloses counter

arrangements for tracking the number of uses for consumable units in office equipment, specifically those consumable units which require replacement after a predetermined number of uses. Even though some of the consumables may replace the same item, the usage count is maintained for each individual consumable. For the consumables, automatic identification of replaced items is provided, whereby the counter arrangement is enabled to accumulate usage counts on the correct consumables. See Kobayashi, Abstract.

Page 8 of the Office Action asserts that Kobayashi (Figure 1 and Column 2, lines 18 to 24 and 27 to 39) discloses a production lot number, or an identification number or code such as the manufacturer's serial number, which is associated with consumables collected in a storage area.

However, the cited portions of Kobayashi are seen to disclose that the office machine maintains a count in *its* memory for each individual consumable unit, in contrast to lot information stored in a memory of the consumable unit itself. See Kobayashi, Column 2, lines 16 to 24. A control means detects an identification code of the consumable, but this identification code is used solely by the office machine and is not seen to be sent elsewhere by the office machine. See Kobayashi, Figures 1 and 2 and Column 2, lines 54 to 62 and Column 3, lines 14 to 67. Thus, Kobayashi also fails to disclose or suggest the feature of receiving lot information which is stored in a memory of a consumable unit detachably located in an image forming apparatus and is output by the external apparatus.

As such, Kobayashi also clearly cannot describe the additional feature of distributing a control software, based on that lot information, to an external apparatus via the network.

Therefore, for at least the foregoing reasons, Claims 40 and 50 are believed to be in condition for allowance and Applicants respectfully request same.

Independent Claims 45 and 55

The invention of independent Claims 45 and 55 generally concerns distribution of control software used by an image forming apparatus to an external apparatus via a network. Identifying information and operating information of consumable units are received, and control software is selected based on the information received. Among its many features, the invention of independent Claims 45 and 55 includes selecting a control software from plural different control software according to combination of the identifying information and the operation information being received, wherein at least some of the plural different software are different depending on the combination of identifying information and operation information received.

Referring specifically to claim language, independent Claim 45 is directed to a software distributing system for distributing control software used by an image forming apparatus to an external apparatus via a network. The system includes a receiving unit configured to receive identifying information and operating information of a consumable unit detachably located in an image forming apparatus, the information being output by the external apparatus. The system also includes a selecting unit configured to select a control software from plural different control software according to the combination of the identifying information and the operation information received by the receiving unit, wherein at least some of the plural different software are different depending on the combination of identifying information and operation information received by the receiving unit. The system also includes a controller unit configured to distribute the control software, selected by the selecting unit, to the external apparatus via the network.

Independent Claim 55 is directed to an information processing method for distributing control software used by an image forming apparatus to an external apparatus via a network. The method includes a receiving step which receives identifying information and operating information of a consumable unit detachably located in an image forming apparatus, the information being output by the external apparatus. The method also includes a selecting step which selects a control software from plural different control software according to the combination of the identifying information and the operation information received by the receiving step, wherein at least some of the plural different software are different depending on the combination of identifying information and operation information received by the receiving step. Additionally, the method includes a controlling step which distributes the control software, selected by the selecting step, to the external apparatus via the network.

In contrast, Applicants respectfully submit that the art of record is not seen to suggest or disclose at least the feature of selecting a control software from plural different control software according to combination of the identifying information and the operation information being received, wherein at least some of the plural different software are different depending on the combination of identifying information and operation information received.

Page 4 of the Office Action asserts that Iizuka (Column 15, lines 60 to 62 and Column 16, lines 6 to 8) discloses a deciding means in which the application server also retrieves the predetermined consumable-unit information from the database server and then decides the appropriate image formation control software, which is then distributed to the external equipment via the network.

However, the portions of Iizuka cited by the Office Action simply disclose that software and data for the image forming apparatuses are updated from the application server when the software and data are corrected or registered again based on information accumulated in the database server. See Iizuka, Column 15, lines 53 to 62. In response to a request from an image forming apparatus, prescribed data can be delivered from the database server through the web server, and data of the prescribed software can be delivered from the application server. See Iizuka, Column 16, lines 4 to 8.

In contrast, this is not seen to be the same as selecting a control software from plural different control software according to combination of the identifying information and the operation information being received, wherein at least some of the plural different software are different depending on the combination of identifying information and operation information received.

In particular, while the system of Iizuka may obtain information from the image forming apparatus concerning the amount of consumables used by the apparatus for making prints, it does not obtain information from the consumable units at all, much less the combination of identification information and operation information of the consumable unit. See Iizuka, Column 18, lines 17 to 23. As such, Iizuka is not seen to disclose selecting a different control software from plural different software according to a combination of identification information and operation information received. For example, the system of Iizuka might assign the same control software to two photoconductors with the same identification information, even if one photoconductor had been used twice as much as the other. In contrast, in the invention of independent Claims 45 and 55, a different control software might be selected based on the operation information in combination with the identification information.

Kobayashi is not seen to remedy the deficiencies of Iizuka. As explained above, Kobayashi discloses an office machine maintaining a count of the number of uses for consumable units used in the office machine. A usage count is maintained in the office machine for each individual consumable. However, the only information maintained about the consumable unit is the number of uses, and that information is maintained in the office machine, rather than being received from anything else. In particular, the only information processed in Kobayashi regarding a consumable unit is the number of times a consumable unit has been used; any maintenance or replacement is done because of this count in the office machine, rather than because of any operation information of the consumable unit itself. See Kobayashi, Column 2, lines 16 to 33.

As such, Kobayashi is not seen to disclose receiving operation information of a consumable unit at all, much less selecting a control software from plural different software according to the combination of the identifying information and operation information of a consumable unit being received as in the invention of independent Claims 45 and 55.

Accordingly, Kobayashi is not seen to disclose or suggest the feature of select a control software from plural different control software according to combination of the identifying information and the operation information being received, wherein at least some of the plural different software are different depending on the combination of identifying information and operation information received.

Therefore, for at least the foregoing reasons, Claims 45 and 55 are believed to be in condition for allowance and Applicants respectfully request same.


The other claims in the application are each dependent from the independent claims discussed above and are therefore believed to be allowable over the applied

references for at least the same reasons. Because each dependent claim is deemed to define an additional aspect of the invention, however, the individual consideration of each on its own merits is respectfully requested.

No other matters being raised, it is believed that the entire application is fully in condition for allowance, and such action is courteously solicited.

Applicants' undersigned attorney may be reached in our Costa Mesa, California office at (714) 540-8700. All correspondence should continue to be directed to our below-listed address.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Michael K. O'Neill", is written over a horizontal line.

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